

Abstract of the Disclosure

A method of eliciting an immune response against an antigen in a vertebrate subject, the method comprising the steps of providing an antigen-adjuvant composition comprising the antigen and a substantially non-toxic adjuvant molecule having biological activity in mucosal tissues, and administering said antigen-adjuvant composition to the vertebrate subject in a manner such that initial contact occurs in mucosal tissue of the vertebrate subject, whereby an immune response is elicited. Cytokines are preferred adjuvants. Preferred cytokines are interleukin-1 α (IL-1 α) and interleukin-1 β (IL-1 β).